PTO/SB/08A (08-03)

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Substitute for form 1449/PTO

Sheet 1

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(Use as many sheets as necessary)

Complete if Known			
Application Number	10/791,049	·	
Filing Date	March 2, 2004		
First Named Inventor	Xiaorong Wang		
Art Unit			
Examiner Name			
Attorney Docket Number	P03002US1A		

Examiner Initials*	Cite No.1	Document Number  Number-Kind Code <sup>2 (7 Internal</sup> )	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
OA		us- 4,773,521	09-27-1988	Chen	
OA		<sup>US-</sup> 4,829,135	05-09-1989	Gunesin et al.	
OA		us- 4,942,209	07-17-1990	Gunesin	
OA		<sup>US-</sup> 5,594,072	01-14-1997	Handlin Jr, et al.	
OA		<sup>US-</sup> 5,763,551	06-09-1998	Wunsch et al.	
OA		us- 5,847,054	12-08-1998	McKee et al.	
OA		us- 5,891,947	04-06-1999	Hall et al.	
OA		<sup>US-</sup> 5,905,116	05-18-1999	Wang et al.	
OA		<sup>US-</sup> 5,994,468	11-30-1999	Wang et al.	
OA		us- 6,191,217	02-20-2001	Wang et al.	
OA	Ī .	us- 6,204,354	03-20-2001	Wang et al.	
OA	1	<sup>US</sup> 6,255,372	07-03-2001	Lin et al.	
OA		us- 6,437,050	08-20-2002	Krom et al.	· · · · · · · · · · · · · · · · · · ·
OA		us- 2002/0045714 A1	04-18-2002	Tomalia et al.	
OA		US- 2003/0130401 A1	07-10-2003	Lin et al.	
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Examiner Cite	Foreign Patent Document	GN PATENT DOCUME:  Publication Date A	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	Γ	
		Country Code <sup>3</sup> "Number <sup>4</sup> "Kind Code <sup>6</sup> (if Innown)	MM-DD-YYYY		Or Relevant Figures Appear	Ľ
OA		WO 02/081233 A1	10-17-2002	Bridgestone		
OA		WO 03/085040 A2	10-16-2003	Bridgestone		L
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Date Considered 12/14/2006 /Olga Asinovsky/ (06/12/2006)

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Substitut	Substitute for form 1449/PTO			Application Number	10/791,;949	
INFO	INFORMATION DISCLOSURE STATEMENT BY APPLICANT			Filing Date	March 2, 2004	
STA				First Named Inventor	Xiaorong Wang	
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	(Ose as many	9/19012 <b>6</b> 3 //	ecessery)	Examiner Name		
Sheet	2	of	2	Attorney Docket Number	P03002US1A	

Examiner	Cite	NON PATENT LITERATURE DOCUMENTS	1	
Examiner Initials*	No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue	T <sup>2</sup>	
	''''	number(s) publisher city and/or country where published	1 ' 1	
		An article entitled "Dendritic Macromolecules: Synthesis of Starburst Dendrings" DIVALD A LOVAL A Macromolecules Vol. 19 No. 9, 1986, contribution from Functional Polymers/Processes and the Analytical Laboratory Dow Chemical Midland MI 48640 Pgs 2466-2468  An article entitled "Preparation and Characterization of Haterophase Blends)	ill	00
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		An article entitled "Preparation and Characterization of Haterophase Blends		
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1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

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Sheet 1

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known			
Application Number	10/791,049		
Filing Date	March 2, 2004		
First Named Inventor	Wang		
Art Unit	1713		
Examiner Name			
Attorney Docket Number	P03002US1A		

	U. S. PATENT DOCUMENTS						
Examiner Initiats*	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
		Number-Kind Code <sup>2 (1 trout)</sup>					
OA		<sup>us</sup> -6,777,500	08-17-2004	Lean et al.			
OA		<sup>US-</sup> 6,780,937	08-24-2004	Castner			
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Examiner Initiats*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
		Country Code <sup>3</sup> "Number <sup>4</sup> " Kind Code <sup>5</sup> (if known)	MM-DD-YYYY		Or Relevant Figures Appear	T®
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Examiner Signature	/Olga Asinovsky/ (06/12/2006)	Oate Considered	12/14/2006

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Sheet 1

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

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Complete if Known			
Application Number	10/791,049	_	
Filing Date	March 2, 2004	_	
First Named Inventor	Wang		
Art Unit	1713		
Examiner Name			
Attorney Docket Number	P03002US1A	フ	

Examiner Initials*	Cite No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant
linnera	140.	Number-Kind Code <sup>2 of known)</sup>	MAD-00-1111	Applicant of Cited Document	Figures Appear
OA		us- 4,764,572	8/16/1988	Bean, Jr.	
OA		<sup>US-</sup> 4,871,814	10/3/1989	Gunesin et al.	
OA		<sup>US-</sup> 4,920,160	4/24/1990	Chip et al.	
OA		<sup>US-</sup> 5,036,138	7/30/1991	Stamhuis et al.	
OA		<sup>US-</sup> 5,130,377	7/14/1992	Trepka et al.	
OA		<sup>US-</sup> 5,227,419	7/13/1993	Moczygemba et al.	
OA		us- 5,241,008	7/31/1993	Hall	
OA		us- 5,256,736	10/26/1993	Trepka et al.	. 7.1
OA		us- 5,290,875	3/1/1994	Moczygemba et al.	1 14 50
OA		us- 5,290,878	3/1/1994	Yamamoto et al.	111
OA		<sup>US-</sup> 5,395,902	3/7/1995	Hall	
OA		<sup>US-</sup> 5,399,628	3/21/1995	Moczygemba et al.	
OA ·		<sup>US-</sup> 5,405,903	4/11/1995	Van Westrenen et al.	
OA		us- 5,436,298	7/25/1995	Moczygemba et al.	
OA		us- 5,438,103	8/1/1995	DePorter et al.	
OA		us- 5,462,994	10/31/1995	Lo et al.	
OA		<sup>US-</sup> 5,587,423	12/24/1996	Brandstetter et al.	
OA		US- 5,773,521	7/30/1998	Hoxmeier et al.	
OA		US- 5,955,537	9/21/1999	Steininger et al.	100

	FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	Π			
110.		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (il known)	MM-DD-YYYY		Or Relevant Figures Appear				
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Examiner Signature	/Olga Asinovsky/ (06/12/2006)	Date Considered	12/14/2006	• •

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for form 1449/PTO

## Name of the last o INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

**Application Number** 10/791,049 Filing Date March 2, 2004 First Named Inventor Wang Art Unit 1713 Examiner Name

Attorney Docket Number P03002US1A

**U. S. PATENT DOCUMENTS** Name of Patentee or Cite **Document Number** Pages, Columns, Lines, Where Examiner Publication Date MM-DD-YYYY Initials\* No. Relevant Passages or Relevant Applicant of Cited Document Figures Appear Number-Kind Code<sup>2 (Farmers)</sup> <sup>US-</sup> 5,986,010 11/1/1999 OA OA US-1/30/2001 6.180.693 <sup>US-</sup> 6.359,075 OA 3/19/2002 US- 6,420,486 7/16/2002 OA OA US-12/3/2002 6,489,378 2/10/2004 6,689,469 QA us- 2003/0124353 7/3/2003 OA us- 2003/0149185 8/7/2003 OA US- 2003/0198810 OA 10/23/2003 us- 2003/0225190 OA 12/4/2003 US-US-US US-UŞ. US-US-US-US.

Examiner Initiats*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	Γ.
· <u>-</u> -		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (# Imoun)	MM-DD-YYYY		Or Relevant Figures Appear	74
OA		EP 143500	6/5/1985	Damen		
OA		EP 265142	4/27/1988	Berzinis et al.		
ΟΔ		JP 01279943	1/10/1989	Tsubokura et al.		Г
OA		JP 05132605	5/28/1993	Hayashi et al.		

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Examiner Name					
Attorney Docket Number	P03002US1A	-			

	1 2.		U.S. PATENT C		
Examiner Initials*	Cite	Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where Relevan
	No.1	Number-Kind Code <sup>2 (If known)</sup>	MM-DD-YYYY	Applicant of Cited Document	Passages or Relevant Figures Appear
OA		US- 3,972,963	8/3/1976	Schwab et al.	
OA		US- 4,233,409	11/11/1980	Bulkley	
OA.		US- 4,247,434	1/27/1981	Vanderhoff et al.	
OA		US- 4,463,129	7/31/1984	Shinada et al.	
OA		US- 4,543,403	9/24/1985	Isayama et al.	
OA		US- 4,659,790	4/21/1987	Shimozato et al.	
OA		US- 4,788,254	11/29/1988	Kawakubo et al.	
OA		US- 4,829,130	5/9/1989	Licchelli et al.	
OA		US- 4,837,274	6/6/1989	Kawakubo et al.	
OA		US- 4,837,401	6/6/1989	Hirose et al.	
OA		US- 4,870,144	9/26/1989	Noda et al.	
OA		US- 4,904,730	2/27/1990	Moore et al.	
OA		US- 4,904,732	2/27/1990	wahara et al.	
OA		US- 4,906,695	3/6/1990	Blizzard et al.	
OA		US- 5,075,377	12/24/1991	Kawakubo et al.	·
OA		US- 5,120,379	6/9/1992	Noda et al.	
OA		US- 5,514,753	5/7/1996	Ozawa et al.	
OA		US- 5,169,914	12/8/1992	Kaszas et al.	
OA		US- 5,219,945	6/15/1993	Dicker et al.	

FOREIGN PATENT DOCUMENTS						
Examiner nitials*	Cite No.1	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant	
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5 (F treen)</sup>			Figures Appear	т'
OA		WO 01/87999A2	11/22/2000	Faust et al.		
OA	<u></u>	WO 02/100936	12/19/2002	Exxon Chem.		
OA		WO 02/31002A1	4/18/2002	UAB Res. Found.		
		WO 91/04992	4/18/1991	Exxon Chem.		
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Signature	/Olga Asinovsky/ (06/12/2006)	Considered	12/14/2006

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				Application Number	10/791,049	
INFORMATION DISCLOSURE				Filing Date	March 2, 2004	
			: =	First Named Inventor	Wang	
S			APPLICANT	Art Unit	1713	
(Use as many sheets as necessary)		Examiner Name				
Sheet	2	of	7	Attorney Docket Number	P03002US1A	

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	110.	Number-Kind Code <sup>2 (f known)</sup>	William Do-11111	Applicant of Cited Document	Passages or Relevant Figures Appear
OA		US- 5,237,015	8/17/1993	Urban	
OA		US- 5,247,021	9/21/1993	Fujisawa et al.	
OA		US- 5,262,502	11/16/1993	Fujisawa et al.	
OA		US- 5,290,873	3/1/1994	Noda et al.	
OA		US- 5,331,035	7/19/1994	Hall	
OA		US- 5,336,712	8/9/1994	Austgen, Jr. et al.	
OA		US- 5,421,866	6/6/1995	Stark-Kasley et al.	
OA		US- 5,447,990	9/5/1995	Noda et al.	
OA		US- 5,487,054	12/8/1998	McKee et al.	
OA		US- 5,525,639	6/11/1996	Keneko et al.	
OA		US- 5,527,870	6/18/1996	Maeda et al.	
OA		US- 5,580,925	12/3/1996	Iwahara et al.	
OA		US- 5,614,579	3/25/1997	Roggeman et al.	
OA		US- 5,627,252	5/6/1997	De La Croi Habimana	
OA		US- 5,688,856	11/18/1997	Austgen, Jr. et al.	
OA		US- 5,728,791	3/17/1998	Tamal et al.	
OA		US- 5,733,975	3/31/1998	Aoyama et al.	
OA		US- 5,739,267	4/14/1998		<del>                                     </del>
OA		US- 5,777,037	7/7/1998	Fujisawa et al. Yamanaka et al.	<del> </del>

FOREIGN PATENT DOCUMENTS						
Examiner Initials* Cite No.1 Foreign Patent Document  Country Code <sup>3</sup> Number* Kind Code <sup>3</sup> of browny		Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant	
				Figures Appear		
OA		WO2004/058874	7/15/2004	Bridgestone Corp.		<u> </u>
OA		EP 0 265 142 A2	4/27/1988	Rohm and Haas		
OA		EP 0 590 491 A2	4/6/1994	Bridgestone		
OA		EP 1 099 728 A1	5/16/2001	Chiba et al.		

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STATEMENT BY APPLICANT (Use as many sheets as necessary)			First Named Inventor	Wang	
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· IIIIais	NO.	Number-Kind Code <sup>2 (If known)</sup>	WW-DD-TTTT	Applicant of Cited Document	Passages or Relevant Figures Appear
OA		US- 5,811,501	9/22/1998	Chiba et al.	
OA		US- 5,834,563	11/10/1998	Kimura et al.	
)A		US- 5,849,847	12/15/1998	Quirk	
OA		US- 5,855,972	1/5/1999	Kaeding	
OA		US- 5,883,173	3/16/1999	Elspass et al.	
OA		US- 6,011,116	1/4/2000	Aoyama et al.	
OA		US- 6,020,446	2/1/2000	Okamoto et al.	
OA		US- 8,025,416	2/15/2000	Proebster et al.	
OA		US- 6,025,445	2/15/2000	Chiba et al.	
OA		US- 6,060,559	5/9/2000	Feng et al.	
OA		US- 6,087,016	7/11/2000	Feeney et al.	
OA		US- 6,087,456	7/11/2000	Sakaguchi et al.	
OA		US- 6,106,953	8/22/2000	Zimmermann et al.	
OA		US- 8,117,932	9/12/2000	Hasegawa et al.	
OA		US- 6,121,379	9/19/2000	Yamanaka et al.	
OA OA		US- 6,147,151	11/14/2000	Fukumoto et al.	
)A		US- 6,268,451	7/31/2001	Faust et al.	
)A	Ī	US- 6,277,304	8/21/2001	Wei et al.	
OA		US- 6,348,546	2/19/2002	Hiiro et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document  Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> of Annum	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	т6
OA.		EP 1 134 251 A1	9/19/2001	Okamoto et al.		<del>'-</del> -
OA		JP 08-199062	8/6/1996	Mitsubishi Chem.		

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March 2, 2004 Wang 1713 **Examiner Name** 

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			U.S. PATENT D	OCUMENTS	
Examiner nitials*	Cite No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevan
1110013	NO.	Number-Kind Code <sup>2 (If known)</sup>	14114-00-1111	Applicant of Cited Document	Passages or Relevant Figures Appear
OA		US- 6,573,330	6/3/2003	Fujikake et al.	
OA	ļ	US- 6,598,645	7/29/2003	Larson	
OA		US- 6,649,702	11/18/2003	Rapoport et al.	
OA		US- 6,750,297	6/15/2004	Yeu et al.	
OA		US- 6,759,464	7/6/2004	Ajbani et al.	
OA		US- 6,835,781	12/28/2004	Kondou et al.	
OA	<u> </u>	US- 6,872,785	3/29/2005	Wang et al.	
OA		US- 6,875,818	4/5/2005	Wang	
OA		US- 2002/0095008	7/18/2002	Heimrich et al.	
OA		US- 2002/0144401	10/10/2002	Nogueroles Vines et al.	
OA		US- 2003/0004250	1/2/2003	Ajbani et al.	
OA		US- 2003/0032710	2/13/2003	Larson	
OA		US- 2004/0059057	3/25/2004	Swisher et al.	
OA		US- 2004/0127603	7/1/2004	Lean et al.	
OA		US- 2004/0143064	7/22/2004	Wang	
OA.		US- 2004/0198917	10/7/2004	Castner	
OA		US- 2005/0101743	5/12/2005	Stacy et al.	
OA		US- 2005/0203248	9/15/2005	Zheng et al.	
OA		US- 6,706,813	3/16/2004	Chiba et al.	•

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant	
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## STATEMENT BY APPLICANT

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Sheet 5

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Application Number	10/791,049
Filing Date	March 2, 2004
First Named Inventor	Wang
Art Unit	1713
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Attorney Docket Number	P03002US1A

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OA		US- 6,060,549	5/9/2000	Li et al.	
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		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
OA		Star Polymers by Immobilizing Functional Block Copolymers, by Koji Ishizu, Tokyo Institute of Technology, Meguro-ku, Tokyo, Japan, Star and Hyperbranched Polymers, 1999, ISBN 0-8247-1986-7	
OA		Formation of Worm-like Micelles from a Polystyrene-Polybutadiene-Polystyrene Block Copolymer in Ethyl Acetate, Canham et al., J.C.S. Faraday I, 1980, 76, 1857-1867	
OA		Anomalous Behaviour of Solutions of Styrene-Butadiene Block Copolymers in Some Solvents, Tuzar et al., Makromol. Chem. 178, 22743-2746 (1977)	•
OA		Association of Block Copolymers in Selective Solvents, 1 Measurements on Hydrogenated Poly(styrene-isoprene) in Decane and in trans-Decalin, Mandema et al., Makromol. Chem. 180, 1521-1538 (1979)	
OA		Light-Scattering Studies of a Polystyrene-Poly(methyl methacrylate) Two-Blcok Copolymer in Mixed Solvents, Utiyama et al. Macromolecules Vol. 7, No. 4, July-August, 1974	
OA		Greenwod, N.N.; Earnshaw, A., Chemistry of the Elements, pp 1126-1127, Pergaroen Press, New York 1984	
0, A.		Functionalized Core-Shell Polymers Prepared by Microemulsion Polymerization, E. Mendizabal et al., Dept. of Ingenieria Quimica, Unviv. De Guadalajara, MX, 477/ANTE 97/1733-1737	
OA		Kink-Block and Gauche-Block Structures of Bimolecular Films, Gehard Lagaly, Chem. Int. Ed. Engl. Vol. 15 (1976) No. 10, pp 575-586	
OA		Linear Viscoelasticity of Disordered Polystyrene-PolyisopreneLayered-Silicate Nanocomposites, J. Ren, Dept. of Chem Eng. Univ. of Houston, Macromol. 2000, pp 3739-3746	
OA		Rheology of End-Tethered Polymer Layered Silicate Nanocomposites, R. Krishnamoorti et al., Macromol. 1997, 30, 4097-4102	

Examiner Signature	/Olga Asinovsky/	(06/12/2006)	Date Considered	12/14/2006	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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STA	STATEMENT BY APPLICANT			First Named Inventor	Wang	
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Sheet	7	of	7	Attorney Docket Number	P03002US1A	

		NON PATENT LITERATURE DOCUMENTS	
Examiner nitials*	Cite No.1	Include name of author (in CAPITAL LETTERS), litle of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where p	T <sup>2</sup>
OA		Rheology of Nanocomposites Based on Layered Silicates and Polyamide-12, B. Hoffman et al., Colloid Polm. Sci. 278:629-636 (2000)	
OA		Quaternary Ammonium Compounds, Encyclopedia of Chem Tech., 4th Ed. Vol. 20, 1996, Wiley & Sons, pp. 739-767	
OA			
	<del> </del> -	R.P. Quirk and S.C. Galvan, Macromolecules, 34, 1192-1197 (2001)	
OA		M. Moller, J.P. Spaz, A. Roescher, S. Mobmer, S.T. Selvan, H.A. Klok, Macromol. Symp. 117, 207- 218 (1997)	
OA			
	<del> </del>	T. Cosgrove, J.S. Phipps, R.M. Richardson, Macromolecules, 26, 4363-4367 (1993)	
OA		S. Mossmer, J.P. Spatz, M.Moller, T. Aberle, J. Schmidt, W. Burchard, Macromol. 33, 4791-4798 (2000)	
O.A .		Functionalized Core Shell Polymers Prepared by Microemulsion Polymerization, E. Mendizabal, J.E. Pugl, A. Aguiar, S. Gonzalez-Villegas, 477/Antec '97/1733-1737	
OA		Ultrahydrophobic and Ultrayophobic Surfaces: Some Comments and Examples, Wei Chen et al., The ACS Journal of Surfaces and Colloids, May 11, 1999, Vol. 15, No. 10, pp 3395-3399, Polymer Science and Engineering Dept., Univ. of MA, Amherst, MA 01003	
OA		Super-Repellent Composite Fluoropolymer Surfaces, S.R. Coulson, I. Woodward, J.P.S. Badyal, The Journal of Physical Chemistry B, Vol. 104, No. 37, Sept. 21, 2000, pp. 8836-8840, Dept. of Chemistry, Science Laboratories, Durham University, Durham, DH1 3LE, England, U.K.	
OA		Transformation of a Simple Plastic into a Superhydrophobic Surface, H. Yildirim Erbil et al., Science Vol. 299, Feb. 28, 2003, pp. 1377-1380	

Examiner			 Date	12/14/2006	_
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Signature	/Olga Asinovsky/	(00/12/2006)	Considered		
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